REMARKS

I. PRELIMINARY REMARKS

Claims 1, 19, 20 and 35 have been amended. Claims 18, 33 and 34 have been canceled. Claims 36-41 have been added. Claims 1, 3, 5-15, 17, 19-32 and 35-41 remain in the application. Reexamination and reconsideration of the application, as amended, are respectfully requested.

Applicant notes with appreciation that the Examiner has indicated that claim 35 would be allowable if rewritten in independent form including the limitations of claim 34. As claim 35 has been rewritten in independent form including the limitations of claim 34, applicant respectfully submits that claim 35 is in condition for allowance.

II. REJECTION NOT RELATED TO PATENTABILITY

Claim 20 has been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant respectfully submits that the rejection under 35 U.S.C. § 112, second paragraph, has been obviated by the amendment to claim 20 and should be withdrawn. Applicant notes that the amendment is not intended to limit the claimed invention and is being made solely in response to the Examiner's rejection under 35 U.S.C. § 112.

III. PATENTABILITY REJECTIONS – CLAIMS 1, 3, 5-15 AND 17

A. Rejection Based On Lauraitis and Takemura

Claims 1, 3, 5, 7-11 and 17 have been rejected under 35 U.S.C. § 103 as being unpatentable over the combined teachings of the Lauraitis and Roy patents. Claims 1, 5 and 6 have been rejected under 35 U.S.C. § 103 as being unpatentable over the

combined teachings of the Lauraitis and Jackson patents. Claims 1 and 11-14 have been rejected under 35 U.S.C. § 103 as being unpatentable over the combined teachings of the Lauraitis and Takezawa patents. Claims 1 and 15 have been rejected under 35 U.S.C. § 103 as being unpatentable over the combined teachings of the Takemura and Roy patents. The rejections under 35 U.S.C. § 103 are respectfully traversed with respect to the claims as amended above. Reconsideration thereof is respectfully requested.

Independent claim 1 has been rewritten so as to include the limitations originally presented in now canceled claim 18, which was dependent on claim 1.[1] As claim 18 was not rejected under 35 U.S.C. § 103 based on the proposed Lauraitis/Roy, Lauraitis/Jackson, Lauraitis/Takezawa and Takemura/Roy combinations, applicant respectfully submits that the rejections of claims 1, 3, 5-15 and 17 under 35 U.S.C. § 103 based on these combinations have been obviated and should be withdrawn.

B. Rejections Based on the Fenton/Roy Combination

1. The Rejections

Claims 1 and 18 have been rejected under 35 U.S.C. § 103 as being unpatentable over the combined teachings of the Fenton and Roy patents. As claim 18 has been canceled by the above amendment, it is respectfully submitted that the rejection thereof under 35 U.S.C. § 103 has been rendered moot. The rejection of amended claim 1 (which now includes, *inter alia*, the limitations of claim 18) under 35 U.S.C. § 103 is respectfully traversed. Reconsideration thereof is respectfully requested.

2. The Cited References

The Fenton patent discloses a golf club shaft including an inner section 13, tip and butt reinforcing plies 19 and 21, a fiber reinforced layer 23 and a two layers of resin

[1] Applicant notes that claim 1 uses the term "scrim cloth," while claim 18 referred to the more generic "resin pre-impregnated fiberglass sheet."

reinforced with fiberglass fibers (note Figure 5). The fibers in each layer, whether carbon or fiberglass, are unidirectional. The Roy patent discloses a shaft including five unidirectional plies (numbered 10, 20, 30, 44 and 54). Each of the Roy plies are fiber reinforced. Some of the fibers are high modulus fibers, such as boron or carbon fibers, which are used to reinforce the butt end of the shaft.

3. Discussion

Independent claim 1 calls for a combination of elements including, *inter alia*, a plurality of fiber reinforced resin layers, a plurality of first metal fibers, a plurality of second metal fibers, an inner scrim cloth and an outer-most scrim cloth. Independent claim 1 also states that "one of the plurality of first metal fibers and the plurality of second metal fibers is located between the inner and out-most scrim cloths." The cited references fail to teach or suggest such a combination.

For example, as is known to those of skill art, scrim cloth includes woven fibers that cross over one another to form the cloth within the resin. All of the reinforcing fibers disclosed in the Fenton and Roy patents are unidirectional. Thus, the fact that the Fenton and Roy patents fail to teach or suggest the claimed combination of first and second metal fibers notwithstanding, the Fenton and Roy patents also fail to teach or suggest a combination of elements including metal fibers located between two scrim cloths, as defined by independent claim 1.

As the cited references fail to teach or suggest the combination of elements recited in independent claim 1, whether viewed alone or in combination, applicant respectfully submits that the rejection of claim 1 under 35 U.S.C. § 103 should be withdrawn.

III. PRIOR ART REJECTIONS – CLAIMS 19-32

A. The Rejections

Claims 19-22 and 24-34 have been rejected under 35 U.S.C. § 103 as being unpatentable over the combined teachings of the Takezawa and Lauraitis patents. Claim 23 has been rejected under 35 U.S.C. § 103 as being unpatentable over the combined teachings of the Takezawa, Lauraitis and Jackson patents. As claims 33 and 34 have been canceled by the above amendment, it is respectfully submitted that the rejection thereof under 35 U.S.C. § 103 has been rendered moot. The rejections of the remaining claims under 35 U.S.C. § 103 are respectfully traversed with respect to the claims as amended above. Reconsideration thereof is respectfully requested.

B. The Cited References

The Takezawa patent discloses a variety of hybrid prepreg sheets. The sheets include resin reinforcing fibers 2 (such as carbon fibers) and a plurality of additional foreign fibers 6. The fibers in each Takezawa sheet are unidirectional. The Lauraitis patent discloses a shaft including a number of conventional fiber reinforced resin layers that are arranged in such a manner that the shaft purportedly feels like a steel shaft. The fibers within each Lauraitis layer are also unidirectional.

C. Discussion

Independent claim 19 calls for a combination of elements including, *inter alia*, a plurality of resin layers, an inner scrim cloth over the plurality of resin layers, an outer-most scrim cloth, a plurality of first metal fibers located between two of the resin layers, and a plurality of second metal fibers located between the inner scrim cloth and the outer-most scrim cloth. The cited references fail to teach or suggest such a combination.

For example, as is known to those of skill art, scrim cloth includes woven fibers that cross over one another to form the cloth within the resin. All of the reinforcing fibers disclosed in the Takezawa and Lauraitis patents are unidirectional. Thus, the fact that the Takezawa and Lauraitis patents patents fail to teach or suggest the claimed combination of first and second metal fibers notwithstanding, the Takezawa and Lauraitis patents also fail to teach or suggest a combination of elements including metal fibers located between two scrim cloths, as defined by independent claim 19.

As the cited references fail to teach or suggest the respective combinations of elements recited in independent claim 19, whether viewed alone or in combination, applicant respectfully submits that the rejection of claims 19-22 and 24-32 under 35 U.S.C. § 103 should be withdrawn.

With respect to claim 23, applicant respectfully submits that the Jackson patent fails to remedy the above-identified deficiencies with respect to the proposed Takezawa/Lauraitis combination. As such, claim 23 is patentable for at least the same reasons as claim 19 and the rejection thereof under 35 U.S.C. § 103 should also be withdrawn.

IV. NEWLY PRESENTED CLAIMS 36-41

Newly presented claims 36 and 37 respectively depend from independent claims 1 and 19 and, therefore, are patentable for at least the same reasons as independent claims 1 and 19.

Newly presented independent claim 38 calls for a combination of elements including "a plurality of fiber reinforced resin layers defining a tip, a tip section, a main body section, a grip section, a butt and a longitudinal axis," "an inner scrim cloth over the fiber reinforced resin layers," "an outer scrim cloth" and "a plurality of longitudinally extending metal fibers located between the inner and outer scrim cloths." Applicant respectfully submits that the cited references fail to teach or suggest such a combination and that claims 38-41 are, therefore, patentable thereover.

V. CLOSING REMARKS

In view of the foregoing, it is respectfully submitted that the claims in the application are in condition for allowance. Reexamination and reconsideration of the application, as amended, are respectfully requested. Allowance of the claims at an early date is courteously solicited.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is respectfully requested to call applicant's undersigned representative at (310) 563-1458 to discuss the steps necessary for placing the application in condition for allowance.

The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 50-0638. Should such fees be associated with an extension of time, applicant respectfully requests that this paper be considered a petition therefor.

Respectfully submitted,

3/27/02
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VERSION OF AMENDMENTS TO APPLICATION WITH MARKINGS TO SHOW CHANGES MADE

Claims 1, 19, 20 and 35 have been amended as follows:

1. (Twice Amended) A golf club shaft, comprising:

a plurality of fiber reinforced resin layers defining a tip, a tip section, a main body section, a grip section, and a butt; [and]

a plurality of first metal fibers, defining a first length and longitudinal ends, located between two of the fiber reinforced resin layers such that one of the longitudinal ends of each of the first metal fibers is substantially aligned with the tip; [and]

a plurality of second metal fibers, defining a second length and longitudinal ends, located between two of the fiber reinforced resin layers such that one of the longitudinal ends of each of the second metal fibers is substantially aligned with the tip, the second length being greater than the first length;

an inner scrim cloth; and

an outer-most scrim cloth;

wherein one of the plurality of first metal fibers and the plurality of second metal fibers is located between the inner and out-most scrim cloths.

19. (Twice Amended) A golf club shaft, comprising:

a plurality of resin layers defining a tip, a tip section, a main body section, a grip section, and a butt, at least one of the resin layers being a fiber reinforced resin layer; [and]

an inner scrim cloth over the plurality of resin layers;

an outer-most scrim cloth;

a plurality of first metal fibers located between two of the resin layers and defining a first length; and

a plurality of second metal fibers located between [two of the resin layers] the inner scrim cloth and the outer-most scrim cloth, the second metal fibers being

formed from a different metal than the first metal fibers and defining a second length that is greater than the first length.

20. (Twice Amended) A golf club shaft as claimed in claim 19, wherein [each] a [of the] plurality of the resin layers [comprises a plurality of] are fiber reinforced resin layers.

35. (Amended) A golf club shaft [as claimed in claim 34,] , comprising:

a plurality of fiber reinforced resin layers defining a tip, a tip section, a main body section, a grip section, and a butt; and

a plurality of relatively heavy metal fibers extending from the tip towards to the butt, defining a first length and located between two of the fiber reinforced resin layers;

a plurality of relatively stiff metal fibers extending from the tip towards to the butt, defining a second length and located between two of the fiber reinforced resin layers, the second length being greater than the first length; and

a plurality of relatively resilient metal fibers extending from the tip towards to the butt, defining a third length and located between two of the fiber reinforced resin layers, the third length being greater than the second length;

wherein at least one of the plurality of relatively heavy metal fibers, the plurality of relatively stiff metal fibers, and the plurality of relatively resilient metal fibers is located between a different two of the fiber reinforced resin layers than the other of the plurality of relatively heavy metal fibers, the plurality of relatively stiff metal fibers, and the plurality of relatively resilient metal fibers.